15

20

25

30

We claim:

1. A method for forwarding a message between a first protocol and a second protocol, the method comprising:

associating with the first protocol a priority function for assigning a priority level to the message; and

invoking the priority function by the second protocol in order to determine the priority level for the message.

- 2. The method of claim 1, wherein the priority function determines the priority level for the message based upon protocol-specific elements of the first protocol.
- 3. The method of claim 1, wherein invoking the priority function by the second protocol comprises:

providing the second protocol with access to the priority function.

4. The method of claim 3, wherein providing the second protocol with access to the priority function comprises:

providing the second protocol with a pointer to the priority function.

- 5. The method of claim 1, further comprising:
 forwarding the message by the second protocol to the first protocol.
- 6. The method of claim 5, wherein forwarding the message by the second protocol to the first protocol comprises:

forwarding the message along with an indication of the priority level for the message.

7. The method of claim 5, wherein forwarding the message by the second protocol to the first protocol comprises:

5

- 8. A device comprising:
- a priority function for assigning a priority level to a message associated with a first protocol; and
- a second protocol operably coupled to invoke the priority function in order to determine the priority level for the message.
- 9. The device of claim 8, wherein the priority function determines the priority level for the message based upon protocol-specific elements of the first protocol.
- 10. The device of claim 8, wherein the first protocol is operably coupled to provide the second protocol with access to the priority function.
- 11. The device of claim 10, wherein the first protocol is operably coupled to provide the second protocol with access to the priority function by providing the second protocol with a pointer to the priority function.
- 12. The device of claim 8, wherein the second protocol is operably coupled to forward the message to the first protocol.
- 13. The device of claim 12, wherein the second protocol is operably coupled to forward the message to the first protocol along with an indication of the priority level for the message.
- 14. The device of claim 12, further comprising a plurality of queues interposed
 25 between the first protocol and the second protocol for interfacing the second protocol to
 the first protocol, wherein each queue corresponds to one of the plurality of priority levels,
 and wherein the second protocol is operably coupled to place the message on the queue
 corresponding to the priority level.

25

30

5

- 15. A program product comprising a computer readable medium having embodied therein a computer program for providing priority forwarding of messages, the computer program comprising:
- a priority function for assigning a priority level to a message associated with a first protocol; and
- a second protocol programmed to invoke the priority function in order to determine the priority level for the message.
- 16. The program product of claim 15, wherein the priority function is programmed to determine the priority level for the message based upon protocol-specific elements of the first protocol.
- 17. The program product of claim 15, wherein the first protocol is programmed to provide the second protocol with access to the priority function.
- 18. The program product of claim 17, wherein the first protocol is programmed to provide the second protocol with access to the priority function by providing the second protocol with a pointer to the priority function.
- 19. The program product of claim 16, wherein the second protocol is programmed to forward the message to the first protocol.
- 20. The program product of claim 19, wherein the second protocol is programmed to forward the message to the first protocol along with an indication of the priority level for the message.
- 21. The program product of claim 19, wherein the second protocol is programmed to forward the message to the first protocol by determining a queue from among a plurality of queues based upon the priority level for the message and placing the message on the queue corresponding to the priority level.



22. A method for forwarding a message through a layered protocol stack, the method comprising:

receiving the message by a first protocol of the layered protocol stack; invoking by said first protocol a priority function associated with a second protocol of the layered protocol stack in order to determine a priority level for the message; and

forwarding the message by the first protocol to the second protocol according to the priority level for the message.